

WEIGHT MANAGEMENT BEHAVIORS USED BY ACTIVE DUTY NURSES TO
MAINTAIN COMPLIANCE WITH MILITARY WEIGHT CONTROL STANDARDS

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ABSTRACT

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WEIGHT MANAGEMENT BEHAVIORS USED BY ACTIVE DUTY NURSES IN
RESPONSE TO MILITARY WEIGHT CONTROL STANDARDS

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DEDICATION AND ACKNOWLEDGMENT

It has been said that nothing in life worth having is easy. If that is true, then this experience is definitely worth having. I want to dedicate this thesis to my beautiful wife Stephanie. If it were not for all of her enduring love, support, and understanding during this very challenging time, none of this would have been possible. She is the glue that holds it all together.

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TABLE OF CONTENTS

CHAPTER ONE.....	1
Introduction.....	1
Link to Healthcare.....	1
Purpose of Research.....	2
Research Questions.....	2
Background and Significance.....	2
Variables and Proposed Relationships.....	3
Theoretical Framework.....	3
Key Terms.....	5
CHAPTER TWO: REVIEW OF LITERATURE.....	7
Gaps in Knowledge Base.....	9
Contribution to Healthcare.....	9
CHAPTER THREE: METHODOLOGY.....	10
CHAPTER FOUR: DATA ANALYSIS.....	12
Results.....	12
Demographics.....	13
Responses to Questions.....	14
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS.....	21
REFERENCES.....	23
APPENDICES.....	26

LIST OF TABLES

Table 1. Characteristics of Respondents.....	13
Table 2. Difficulties in Maintaining Weight.....	15
Table 3. Desire to lose Weight.....	16
Table 4. Weight Control/Loss Behaviors.....	18
Table 5. Amount and Type of Exercise.....	20

LIST OF FIGURES

Figure 1. Weight Control/Loss Behaviors.....	19
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CHAPTER ONE

Introduction

Abnormal eating behaviors surrounding the bi-annual, service specific military weigh-ins are a significant problem to military administrators. The Armed Forces have placed physical fitness of personnel as one of its top priorities. Earliest efforts were directed towards drug and alcohol abuse, then towards weight control, and recently, smoking cessation (Sweeney & Bonnabeau, 1990). Typically, the way the military enforced weight control policies, was to eliminate any favorable action while the individual was over weight. This could range from denial of military schools, refusal of leave and temporary duty assignments to involuntary separation from service. As one might expect, this can place a great deal of stress on some individuals. Studies were done on groups of military men and women to see if the stress of the mandatory weigh-in and physical fitness test was enough for them to use unhealthy behaviors to control their weight (Sweeney & Bonnabeau, 1990). The studies did show that the service members were using unhealthy weight control behaviors and that those behaviors could have a negative effect on their fighting strength and undermine the mission of the military.

Link to Healthcare

The connection of this problem to healthcare is important. First, healthcare providers are charged with the responsibility of the health of the fighting force. Providers should set a good example for the clients they serve. Including following healthy eating and weight control guidelines. Surprisingly, McNulty (1997) did a study on a population of female navy nurses that showed almost half (49.6% out of 704 surveyed) had utilized some form of an unhealthy weight control behavior. How can the fighting force be

educated against the dangers of unhealthy behaviors when the educators themselves are practicing the very same behaviors? Providers must first look to themselves to correct this problem and then to the service members. Education is key to the solution for this problem. If this can be done, it will have a significant impact on improving the health of the providers themselves and the clients they serve.

Purpose of Research

The purpose of this study is to describe the weight management behaviors used by active duty nurses to maintain compliance with the military weight control standards. This study will provide a perspective on the positive and negative behaviors utilized by active duty service members. The results of this study may reveal an area of health promotion that requires attention from health care professionals.

Research Questions

To date, very little has been published on unhealthy weight control behaviors surrounding weigh-ins in the military. The questions this study proposed to answer were:

1. What weight control behaviors are active duty nurses using?
2. Are these behaviors performed in response to the weigh-in and physical fitness test?

Answering these questions should lead to a better understanding of the behaviors used by military nurses to maintain or lose weight. The hypothesis for this study was that active duty nurses engage in unhealthy weight management behaviors for the purpose of meeting weight control standards.

Background and Significance

Everyone who wears a uniform in the military shares the stress of being in

compliance with standards. This stress has been shown to have a profound effect on weight control behaviors surrounding the mandatory weigh-in. Sweeney and Bonnabeau (1990) questioned whether the weight control program was “encouraging positive health behaviors as intended, or is it also fostering negative, unhealthy practices as individuals attempt to meet preestablished designated weight and body fat standards (p. 256)?” There is no question that these practices can have a negative effect on the physiological and psychological health of the fighting force. However, they have not been well described for military nurses.

Variables and Proposed Relationships

The research variables for this study fall under the broad category of weight control behaviors as well as demographic variables. They include the use of positive weight control behaviors such as weight control programs and exercise and unhealthy behaviors such as the use of diuretics and laxatives. The data were collected by a questionnaire given to a group of active duty graduate nursing students at the Uniformed Services University.

Theoretical Framework

The theoretical framework used for this study was the Neuman systems model developed in the late 1960's by Dr. Betty Neuman while she was lecturing in community health at UCLA. Her model was published as a “Model for teaching total person approach to patients problems” (Neuman 1989). The model was based on the philosophy of deChardin, Gestalt theory, Hans Selye's work on stress and stress responses, and general systems theory.

A basic concept of this model is a representation of the client within a total system. It looks at the client holistically and multi-dimensionally. It describes the five components of interacting client variables; physiological, psychological, developmental, sociocultural and spiritual in relation to environmental influences upon the client as a system consisting of basic structure, lines of resistance and line of defense. The person, with a core of basic structures, is viewed as being in constant, dynamic interaction with the environment. Around the basic core structures are lines of defense and resistance, with the lines of resistance being nearer to the core (Neuman, 1989). The model looks at the impact of stressors on health and addresses stress and the reduction of stress (in the form of stressors). Neuman (1989), defines stressors as any environmental force, which can potentially affect the stability of the system. These stressors could be intrapersonal (occur within a person, e.g., emotions and feelings), interpersonal (occur between individuals, e.g., role expectations), extrapersonal (occur outside the individual, e.g., job or finance pressures) (Neuman, 1989). These stressors can occur at any time and in any number or combination. Neuman (1989), feels that the person has a certain “degree of reaction” to any given stressor at any given time and that the nature of the reaction depends in part on the strength of the lines of resistance and defense. By means of primary, secondary, and tertiary interventions, the person (or nurse) attempts to restore or maintain the stability of the system. In nursing, this stabilization of the system is accomplished by constant life changes with accuracy both in assessing the effects of environmental stressors and in assisting client adjustments required for optimal level wellness through primary, secondary, and tertiary prevention strategies as intervention (Neuman, 1989).

In terms of utility, this model provides caregivers with the holistic framework needed to succeed in providing the high quality of care that all clients are entitled to receive. Nursing is a profession that prides itself on holistic care. In order to provide this care, nurses need a reliable framework to help guide them to improved patient outcomes. The Neuman model provides the foundation to support the client in all aspects of wellness. Neuman sees the person (and nurse) as being multidimensional. Although different, these dimensions are uniquely tied together in such a way that if one dimension is neglected they all might suffer. Neuman (1989), tells us that the person has a basic “core structure”, comprised of survival mechanisms, including organ function, temperature control, genetic structure, response patterns, ego, and what are termed “knowns and commonalities”. Nursing must take on the responsibility of incorporating all of the basic core structures in managing the patient. This model is also useful in terms of providing framework for families, groups, and communities as well. Community and public health nursing is challenged with the daunting task of managing the health and wellness of large populations. Neuman’s model envisages a wellness-illness continuum that is in dynamic equilibrium. Community/ public health nursing can focus on the continuum and effectively assess the wellness of the public they are serving (Neuman, 1989).

Key terms

Pathogenic weight loss techniques

Conceptual: Behavior used to lose weight that leads to an imbalance in systems, weakness, and possibly even death.

Operational: For this study, behavior that includes, but is not limited to, vomiting, laxative use, severe caloric restriction, anorexia, anorexic exercise, over-use of sauna/steam room, and bulimia (Sweeney & Bonnabeau, 1990).

Healthy weight loss techniques

Conceptual: Weight loss strategies that include a healthy balance of diet and exercise and weight maintenance techniques.

Operational: Weight loss Strategies learned from a class or with the help of a health care provider or nutritionist.

Stressors

Conceptual: Tension-producing stimuli with the potential for causing disequilibrium.

Operational: Events such as bi-annual weigh-ins or no notice weigh-ins (Marriner-Tomey, 1994).

Physical fitness test

Conceptual: A test administered to members of the armed services to determine their level of fitness in relation to their age and gender.

Operational: The Army uses running, push-ups, and sit-ups. The Air Force uses bicycle ergometry and the Navy uses push-ups, sit-ups, and a run or a swim.

Weigh-in

Conceptual: A compliance program common to all military services.

Operational: The weighing of active duty service members either annually or bi-annually and assessing compliance with standards set for their height and weight.

CHAPTER TWO

Review of Literature

A review of the literature for this study centered on studies that were done on groups of military men and women to see if the stress of the mandatory weigh-in and physical fitness test caused unhealthy weight control behaviors (Lauder et al, 1999; Sweeney & Bonnabeau, 1990; Peterson et al, 1995).

The purpose of the study done by Lauder et al. (1999) was to determine the prevalence of abnormal eating behaviors in active duty women in the Army. The main themes identified were the way service women described their eating habits. These habits were either normal, anorexic, bulimic, binge eating, situational or, not otherwise specified. The sample and methods used were 423 active duty Army females from the general population of soldiers at FT. Lewis, WA. who volunteered to participate in the study. They completed an Eating Disorder Inventory questionnaire. Each subject meeting the screening criteria from the questionnaire was then interviewed by a board-certified psychiatrist. The subject was then categorized into a specific group based on the DSM IV criteria. The finding of this study showed that 8% of the respondents in the study had an eating disorder. This is higher than the 1-3% of the general female population. The study indicated the three most common external pressures to be: 1) army weight requirements; 2) the military environment and; 3) Army Physical Fitness Test (APFT). The study states that women report the weigh-ins and APFT as times of high pressure resulting in abnormal dietary behaviors and exercise before these events (Lauder, Williams, Campbell, Davis, & Sherman, 1999).

Peterson et al. (1995) studied the weight-loss behaviors in military versus civilian weight-management programs. It was a descriptive study that also evaluated the presence of bulimic weight-loss behaviors in individuals enrolled in military and civilian weight-loss programs. The variables in this study were behaviors associated with overeating and bulimic weight-loss. The study also looked at weight and shape satisfaction. The sample used in this study was 155 (78 male and 77 female) active duty Air Force and civilian men and women. The civilians were enrolled in non-military weight-loss programs such as Weight Watchers. The method used was a modified version of the Stanford Eating Disorders questionnaire administered to all of the subjects. The study concluded that the military weight-management program group reported engaging in bulimic weight-loss behaviors two to five times more often than the civilian group. The authors suggested that bulimic weight-loss behaviors might develop in individuals who feel extreme pressure to lose or control weight (Peterson, Talcott, Kelleher, & Smith, 1995).

Sweeney and Bonnabeau (1990) did a descriptive study that looked at specific positive and negative health behaviors used by medics in an Army Reserve unit to ensure compliance with the Army Weight Control Standards. The purpose of this study was an attempt to determine if unsafe health care practices were being used among some members of their reserve unit to control and maintain their weight. The sample was 342 officers and enlisted personnel from the reserve unit. Demographic data distinguished only between officer and enlisted categories of personnel. The method used in the study was a questionnaire designed to collect data assessing selected positive and negative health practices that might be used to control or maintain body weight. The authors report the findings as “startling”. The results showed that 38.5% of all respondents have

difficulty maintaining their weight. Of that group 21.4% had been on and off the weight control program at least once. Of interest is the fact that while 83.3% reported being within the standards, almost half of that group expressed a desire to lose additional weight. 41.7% admitted using bulimic behaviors to lose weight prior to weigh-ins. The authors agree that being threatened with placement on the weight control program or possible involuntary separation from service for not meeting the weight standards may cause some individuals to take desperate and unhealthy measures (Sweeney and Bonnabeau, 1990). The fact that all three articles, over a ten-year time span, have the same general conclusions supports the need for more studies.

Gaps in Knowledge Base

Gaps in the knowledge base include the fact that most of these studies were done with women. More studies need to be done on men. There have been many studies done with women athletes but very few on other groups in the general population. It may be helpful to see what weight control behaviors other groups facing similar stressors like the rigorous weight standards faced in the military are using.

Contribution to Healthcare

Healthcare providers should use the findings from previous studies and continue the research in this area. It is healthcare's responsibility to promote the wellness of the fighting force. Identifying unhealthy behaviors in certain individuals in response to a mandatory weigh-in can aid healthcare professionals to institute a change in policy and procedure. Providers also need to better educate individuals to stop unhealthy behaviors, ultimately improving the overall health of the fighting force.

CHAPTER THREE

Methodology

This was a descriptive study using a questionnaire to determine the weight management strategies used by active duty nurses. The purpose of a descriptive study is to identify variables as they occur naturally, without any intervention. Descriptive studies are used to identify problems in current practice. By determining what weight loss behaviors are being used, problems may be identified (Decker, 1997).

There was no manipulation of variables in this study. The area of interest is weight loss behaviors used by active duty nurses. The variables to be identified include the various pathologic weight loss techniques available, as well as the frequency and duration of use.

The initial steps in this study was to slightly modify the tool from Decker, (1997). There was approximately 13 yes/no questions inquiring about the difficulty maintaining weight and specific weight loss behaviors. There was a couple of multiple choice questions asking about how much weight loss was desired and the type and frequency of exercise. Finally, there was a few open-ended questions inquiring about weight loss behaviors used that were not listed and any comments the respondents had about the study.

The content validity of the tool determines to what extent all the major elements of the topic being studied are included. Estimates of the validity of the Decker tool were obtained by having two experts rate the content relevance of each item using a 4-point rating scale. To be considered an expert, the individual needed a minimum of a master's degree in a health field, was identified by their peers as an expert in weight loss or health

promotion, had a military background, and was currently practicing in the field of weight loss or health promotion. The questions from Decker's study were ranked on a scale ranging from 1 (not at all relevant) to 4 (very relevant). The content validity index, based on those results, was 0.83.

Reliability is concerned with how consistently the tool measures the concept of interest. Decker did a pilot study for this tool in order to determine the test-retest reliability of the tool. The reliability of the instrument was determined by percent agreement to be 0.93 based on the responses of the participants who completed her survey on two separate occasions.

The sample was selected using a convenience sampling method. The personnel at the study site were chosen because of the convenient location and the relatively short period of time in which to conduct this study. Approval to conduct the study was obtained from the Institutional Review Board at the Uniformed Services University of Health Sciences. Permission to conduct the survey among graduate students at the Uniformed Services University was also obtained. The questionnaires were distributed to the respondents by hand or via mail with a letter of instruction on completion of the survey and the informed consent form. A cover letter was provided in the packet requesting that the questionnaire be completed and returned in the self-addressed, stamped envelope. Once the questionnaires were received, data entry and analysis was initiated. Descriptive statistics was used to summarize the data.

Since the sample included only 32 nurses, generalizations to the entire military population is not possible. Assumptions included that all responses to the questionnaires were valid and reliable.

CHAPTER FOUR

Data Analysis

The target population for this study consisted of active duty military graduate nursing students from the Uniformed Services University. Thirty-two usable questionnaires were obtained from a sample of this population. Some questionnaires contained incomplete information resulting in varying response rates for different study variables. All branches of the uniformed services are represented in this study including the U.S. Public Health Service. The largest percentage of respondents (50%) were in the Army (See Table 1). Over three-quarters of respondents had the rank of 0-3. Males composed 53% of respondents and 72% of total respondents were between the ages of 30-39.

Table 1

Characteristics of the Respondents

Service	Number	Percent
Army	16	50.0
Air Force	11	34.4
Navy	4	12.5
USPHS	1	3.1
Total	32	100.0

Rank	Number	Percent
O-3	25	78.1
O-4	4	12.5
O-2	2	6.3
O-6	1	3.1
Total	32	100.0

Gender	Number	Percent
Male	17	53.1
Female	15	46.9
Total	32	100.0

Age	Number	Percent
26	1	3.1
28	1	3.1
29	3	9.4
30	2	6.3
31	3	9.4
32	4	12.5
33	1	3.1
34	2	6.3
35	3	9.4
36	2	6.3
37	2	6.3
38	3	9.4
39	1	3.1
42	1	3.1
45	1	3.1
50	1	3.1
60	1	3.1
Total	32	100.0

Difficulties in Maintaining Weight

When asked if they had difficulty maintaining weight, 37.5% said yes and 62.5% said no. When asked if they had ever been on a weight control program, 6.3% said yes and 93.8% said no. None of the respondents were currently on a weight control program. When the participants were asked if they tried to lose weight when told they were not in compliance with military standards, 31.3% said yes and 18.8% said no. This question did not apply to 50% of the respondents. Question number five asked the participants if they had ever joined an organization to help them lose or maintain weight. 15.6% said yes and 84.4% said no (see Table 2).

Table 2

Has Difficulty Maintaining Weight		Number	Percent
	Yes	12	37.5
	No	20	62.5
	Total	32	100.0
Has Been on Weight Control Program in Past		Number	Percent
	Yes	2	6.3
	No	30	93.8
	Total	32	100.0
On Weight Control Program Now		Number	Percent
	No	12	37.5
	N/A	20	62.5
	Total	32	100.0
Tried to Lose Weight		Number	Percent
	Yes	10	31.3
	No	6	18.8
	N/A	16	50.0
	Total	32	100.0
Joined an Organization to Lose or Maintain Weight		Number	Percent
	Yes	5	15.6
	No	27	84.4
	Total	32	100.0

Desire to Lose Weight

The answers to question number six showed that 65.6% want to lose weight and 31.3% do not. One respondent did not answer this question. Of the respondents wanting to lose weight, over half wanted to lose eight pounds or more (see Table 3).

Table 3

Want to Lose Weight	Number	Percent
N/A	1	3.1
Yes	21	65.6
No	10	31.3
Total	32	100.0

Number of Pounds Participants Desiring to Lose	Number	Percent
0	10	31.3
5	2	6.3
7	2	6.3
10	8	25.0
15	5	15.6
20	2	6.3
25	1	3.1
30	2	6.3
Total	32	100.0

Denial of Favorable Actions

This question asked if the individual had ever been denied a school, training program, or award because they were enrolled in a weight control program. 6.3% said yes and 93.8% said no. Of the two respondents that said yes, one (3.1%) said that they had been denied more than one time.

Weight Fluctuations

15.6% stated that their weight either has fluctuated by ten pounds in any given month. 84.4% said that it does not.

Possible Eating Disorder and Treatment

These two questions asked the participants if they thought they might have an eating disorder and if so, did they seek treatment. 9.4% felt that they have an eating disorder and 87.5% felt they did not. One respondent did not answer the question. Of the respondents that answered yes, 3.1% sought out treatment. The rest of the participants, 87.5%, responded no to seeking treatment.

Weight Management Methods

This question refers to the specific weight management methods used by the respondents. The question included six different types of methods to choose from and also inquired about the frequency and timing of the behaviors. 40.6% stated that they severely restricted their diet in order to maintain their weight. 21.9% said they used “popular” dieting regimens. 3.1% said they used self-induced vomiting. 6.3% said they use laxatives. 6.3% said they use diuretics. 37.5% said they use either prescription or non-prescription diet pills. 18.8% said that they used at least one of these methods in the last year. 21.9% said that they use these methods before each weigh-in (see Table 4 and Figure 1).

Table 4

Severely Restricted Dieting

	Frequency	Percent
Yes	13	40.6
No	19	59.4
Total	32	100.0

Popular Dieting Regimens

	Frequency	Percent
Yes	7	21.9
No	25	78.1
Total	32	100.0

Self-induced Vomiting

	Frequency	Percent
Yes	1	3.1
No	31	96.9
Total	32	100.0

Laxatives

	Frequency	Percent
Yes	2	6.3
No	30	93.8
Total	32	100.0

Diuretics

	Frequency	Percent
Yes	2	6.3
No	30	93.8
Total	32	100.0

Prescription/Non-Prescription Diet Pills

	Frequency	Percent
Yes	12	37.5
No	20	62.5
Total	32	100.0

How Often Methods Used In Past Year

	Frequency	Percent
Once	6	18.8
2-5 times	5	15.6
More than 5 times	3	9.4
No response	1	3.1
N/A	17	53.1
Total	32	100.0

When Are Methods Used

	Frequency	Percent
Before each weigh-in	7	21.9
Before each weigh-in while on weight control program	1	3.1
Before reporting for official training/schools	2	6.3
N/A	22	68.8
Total	32	100.0

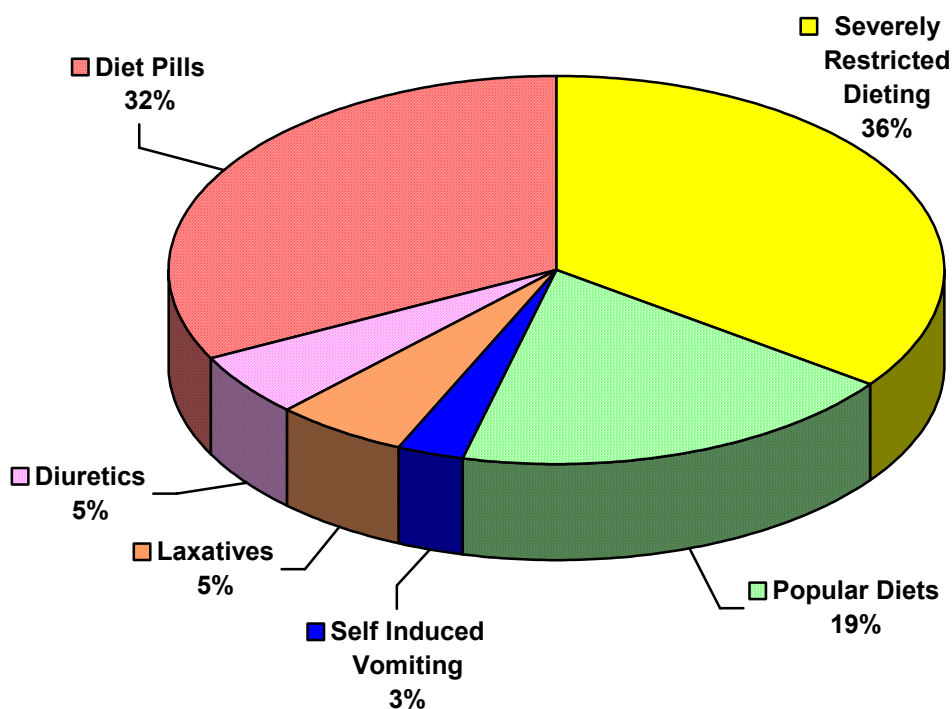


Figure 1. Weight management methods and percentage of use.

Amount and Type of Exercise

Most respondents (81%) stated they had a regular form of exercise. Only 19% did not engage in regular exercise on a weekly basis. Of the 26 respondents that said they did exercise regularly, 18.8% said they exercise every day. Most of the respondents, 62.5% said they exercise 1-4 times a week. 18.8% said they exercise less than once a week (see table 8).

The participants were asked to comment on the type of exercise they practiced (see table 8). 21.9% (N=7) said they used walking or running to stay in shape. The majority of the respondents, 65.6% (N=21), stated that they used more than one type of exercise such as aerobics or cycling (see Table 5

Table 5

Regular Exercise	Frequency	Percent
Yes	26	81.3
No	6	18.8
Total	32	100.0

Frequency of Exercise	Frequency	Percent
Daily	6	18.8
1-4 times week	20	62.5
Less than once a week	6	18.8
Total	32	100.0

Type of Exercise	Frequency	Percent
Walk/run	7	21.9
More than one type	21	65.6
Other	4	12.5
Total	32	100.0

CHAPTER FIVE

Conclusions and Recommendations

The results of this study suggest that active duty nurses are engaging in unhealthy weight management behaviors. It also appears to suggest that these behaviors are being used to maintain compliance with military standards. It would seem, therefore, that being placed under the stress of compliance with standards is causing some individuals to engage in unhealthy or negative behaviors. It has been shown that these behaviors can lead to more serious eating disorders such as Anorexia or Bulimia.

Based on results of previous studies done like this, it would appear that this group of respondents is more the rule than an exception. The most significant finding of this study was that 40.6% of the respondents were using severely restricted dieting as a form of weight management/loss and that 21.9% of them were doing it before each weigh-in. This shows that the respondents are choosing unhealthy behaviors in response to the increased stress of being in compliance with military standards. Three of the respondents thought they might already have an eating disorder. Of those three, only one has sought treatment. This could imply that professional treatment is not high on the priority list or that eating disorders are not as worrisome as disciplinary action against them.

It is disturbing to consider that 15.6% of the respondents had a fluctuation in weight of +/- 10 pounds in one month. Those five nurses are in risk of seriously endangering their health. Thankfully the majority of the respondents 84.4% said they had no such fluctuation.

Of all the respondents, only 6.3% had actually been denied a school or training. This is interesting because the threat of non-compliance is denial of schools, training,

promotions, etc. Yet only 2 respondents had actually been denied. Could this mean that the perceived threat is bigger than reality? It may not make a difference because, according to the results of this study, perception is reality.

It is interesting to note that 65.6% of the respondents want to lose weight. Over half, 56.1%, of the respondents want to lose 10 pounds or more yet only 31.3% of the respondents have actually tried to lose the weight. Only 5 respondents stated that they joined an organization such as Weight Watchers. This is disturbing because these organizations are usually grounded in safe weight-loss techniques.

The stress of being in compliance with military standards for weight is causing unhealthy weight management behaviors among active duty nurses. Based on other studies done in this area, it is more likely that this is more the rule than the exception. Unhealthy weight management behaviors can lead to more serious eating disorders. These more serious disorders can have a negative impact on the physiological and psychological health of our fighting forces. More studies need to be conducted on military units to determine how widespread the problem is. It is possible that Department of Defense policy on weight management needs to be changed.

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APPENDIX A

Weight Control Behaviors Questionnaire

1. Do you have difficulty maintaining your weight?
☐ Yes ☐ No
2. Have you ever been placed on the military weight control program?
☐ Yes ☐ No
3. If yes, are you on the weight control program now?
☐ Yes ☐ No
4. Have you tried to lose weight when told you were not in compliance with military standards?
☐ Yes ☐ No
5. Have you ever joined an organization to help you lose or maintain your weight?
☐ Yes ☐ No
6. Do you want to lose weight?
☐ Yes ☐ No
7. If yes, how many pounds do you wish to lose? Pounds.
8. Have you ever been denied a school, training program, or award due to being on a weight control program?
☐ Yes ☐ No
a. If yes, how many times: times.
9. Does your weight ever increase or decrease (or both) by more than 10 pounds within any month?
☐ Yes ☐ No
10. Do you think you might have an eating disorder such as anorexia nervosa (refusal to maintain a minimally normal body weight) or bulimia nervosa (repeated episodes of binge eating followed by inappropriate compensatory behaviors)?
☐ Yes ☐ No
11. Have you ever received treatment for an eating disorder?
☐ Yes ☐ No
12. Have you ever tried or would you not hesitate to use any of the following methods to lose or maintain your weight?
 - a. Severely restrictive dieting or limited starvation (less than 1200 calories/day)/
☐ Yes ☐ No

Months Weeks Days

Continuously

- a. Restrictive dieting/ _____
limited starvation Months Weeks Days Continuously
- b. Popular dieting _____
Regimes Months Weeks Days
Continuously
- c. Self-induced vomiting _____
Months Weeks Days

Continuously

- d. Taking laxatives _____
Months Weeks Days

Continuously

- e. Taking diuretics _____
Months Weeks Days

Continuously

- f. Taking prescription _____
or non-prescription Months Weeks Days Continuously
diet pills

- g. Exercising _____
Months Weeks Days

Continuously

- h. Other _____
Months Weeks Days

Continuously

- i. Other _____
Months Weeks Days

Continuously

14. Do you have a regular program of exercise?

___ Yes

___ No

15. If yes, do you exercise at least 15 minutes:

___ Daily ___ 1-4 times/week ___ less than 1 time/week

16.If yes, do you:

___ Walk/run

___ Bike

___ Aerobics

___ Other

___ Nautilus/weights

17. What is your current age?

___ years old.

18.What is your gender?

___ Male

___ Female

19.What is your branch of service?

20.What is your rank?

Please make any additional comments on the back of page:

APPENDIX B

Consent Form

Consent Form

Title of Research: Weight Control Behaviors Used by Active Duty Graduate Student Nurses in Response to the Mandatory Weigh-In.

Investigator: Joseph M. Candelario. MAJ/AN, USA
Uniformed Services University of the Health Sciences
Graduate School of Nursing
(301) 528-3566 (home)

Invitation to Participate: You are invited to participate in this study because you are a nurse on active duty currently attending the Uniformed Services University Graduate School of Nursing.

Purpose of Study: The purpose of this study is to describe weight control/loss behaviors used by active duty graduate student nurses in order to maintain compliance with military weight control standards. It is being completed to fulfill the thesis requirement for the Graduate School of Nursing Family Nurse Practitioner Program.

Procedure/Tasks: Each participant will be asked to complete the attached questionnaire, place the completed questionnaire in the self-addressed, stamped envelope provided and mail it back to the investigator.

Risk/Benefit: This study involves no physical risks or discomforts to you. Some participants may experience some psychological distress due to the nature of the questions. While this study may not help you personally, it may provide information to health care providers that could improve the way health promotion education is provided to personnel at risk of unhealthy weight management behaviors.

Alternatives: There are no other alternatives available for participation in this study other than answering this questionnaire.

Confidentiality: Any information obtained in this study will be treated in a confidential manner. Participants will remain anonymous throughout the study.

Right to Withdraw/ Non-coercive disclaimer: Your cooperation is completely voluntary. You have the right to withdraw from the study at any time. You have the right to not answer any or all of the questions. You will not be coerced in any way to participate in this study.

Cost: There is no cost to you for your participation in this study, nor will you be reimbursed for your participation in this study.

Information from the Investigator: The investigator will be available to answer questions regarding this study. The results of the study will be available at the Uniformed Services

University of the Health Sciences Learning Resource Center once the data has been collected and analyzed.

Consent: To maintain anonymity, completion of this questionnaire implies consent to participate in this study.

Thank you very much for your cooperation.